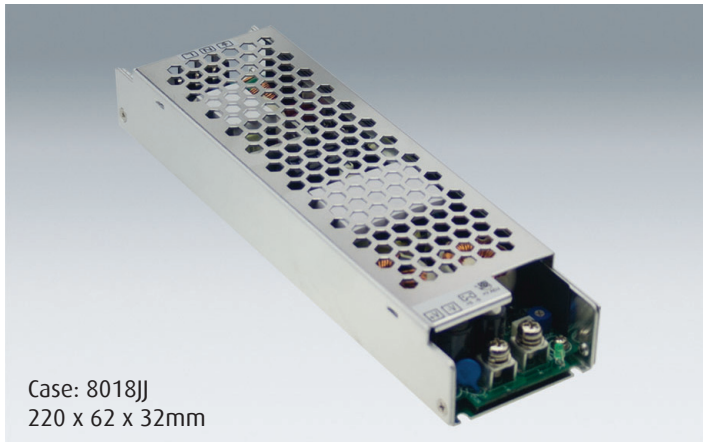


# HSP-150 Series

## 150W Single Output Power Supply with PFC function



Case: 8018JJ  
220 x 62 x 32mm

### Features

- Universal AC Input/Full range
- Withstand 300VAC surge input for 5 seconds
- Built-in active PFC function
- High efficiency up to 90%
- Low leakage current <0.4mA
- Protections: Short circuit / Overload / Over Voltage / Over temperature
- Cooling by free air convection for 150W and 200W with 30CFM forced air
- Low profile: 32mm
- Conformal coated
- ZVS technology to reduce power dissipation
- Built-in remote sense
- LED indicator for power on
- 3 years warranty



### Specification

INPUT	Voltage	90 ~ 264VAC		127 ~ 370VDC		
	Frequency	47 ~ 63 Hz				
	Power Factor	PF>0.95/230VAC		PF>0.98/115VAC at full load		
	Efficiency	86%		88%		90%
	AC Current	0.8A/115VAC	0.4A/230VAC	1.2A/115VAC	0.6A/230VAC	1.5A/115VAC 0.8A/230VAC
	Inrush Current (Typ.)	Cold start 70A/115VAC				
	Leakage Current	<0.4mA/240VAC				
OUTPUT	MODEL No.	<b>HSP-150-2.5</b>		<b>HSP-150-3.8</b>		<b>HSP-150-5</b>
	Voltage	2.5V		3.8V		5V
	Rated Current	30A		30A		30A
	Current Range (convection)	0 ~ 30A		0 ~ 30A		0 ~ 30A
	Peak Current (30CFM Fan)	0 ~ 40A		0 ~ 40A		0 ~ 40A
	Rated Power (convection)	75W		114W		150W
	Peak Power (30CFM Fan)	100W		152W		200W
	Ripple Noise MAX.	80mVp-p		100mVp-p		100mVp-p
	Voltage Adj. Range	2.35 ~ 2.75V		3.4 ~ 4.2V		4.5 ~ 5.5V
	Voltage Tolerance	± 2.0%		± 2.0%		± 2.0%
	Line Regulation	± 0.5%		± 0.5%		± 0.5%
	Load Regulation	± 1.0%		± 1.0%		± 1.0%
	PROTECTION	Setup Rise Time	2000ms, 100ms/230VAC		3000ms, 100ms/115VAC at full load	
Holdup Time (Typ.)		16ms/230VAC		16ms/115VAC at full load		
Overload		140~180% rated output power Protection Type: Hiccup mode, recovers automatically after fault condition is removed				
Short Circuit		Protection type: Hiccup mode, recovers automatically after fault condition is removed				
Over Voltage		3.2 ~ 3.7V		4.7 ~ 5.7V		5.7 ~ 7.0V
ENVIRONMENT	Over Temperature	110°C±5°C (TSW1)		110°C±5°C (TSW1)		115°C±5°C (TSW1)
	Working Temp.	-30 ~ +70°C (Refer to "Derating Curve")				
	Working Humidity	20 ~ 90% RH non-condensing				
SAFETY & EMC	Storage Temp., Humidity	-40 ~ +85°C, 10~95%RH				
	Temp. Co-efficient	±0.03% / °C (0~60°C)				
OTHERS	Vibration	10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes				
	Safety Standards	UL60950-1, EN60950-1 approved				
	Withstand Voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC				
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/70% RH				
	EMC Emission	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2, EN61000-3-3				
OTHERS	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN50204, light industry level (surge 4kV), criteria A				
	M.T.B.F.	263.2K hrs min. MIL-HDBK-217F (25°C)				
	Packaging	0.61Kg; 24pcs/15.6Kg/1.63CUFT				

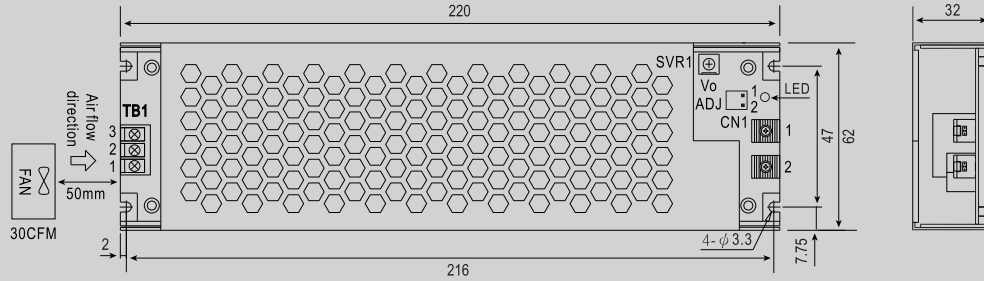
1. All measurements not specially mentioned are based on 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance: Includes set up tolerance, line regulation and load regulation
4. The power supply is considered a component which will be installed into final equipment. All the EMC tests are being executed by mounting the unit on a 360mm\* 360mm metal plate with 1mm thickness. The equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these tests, please refer to "EMI testing of component power supplies."
5. Derating may be needed under low input voltages. Please check the static characteristics for more details.

# HSP-150 Series

## 150W Single Output Power Supply with PFC function



### Mechanical Diagram



AC Input Terminal(TB1) pin NO. Assignment

Pin No.	Assignment	Terminal
1	AC/L	T21-BM10-03
2	AC/N	
3	FG $\perp$	

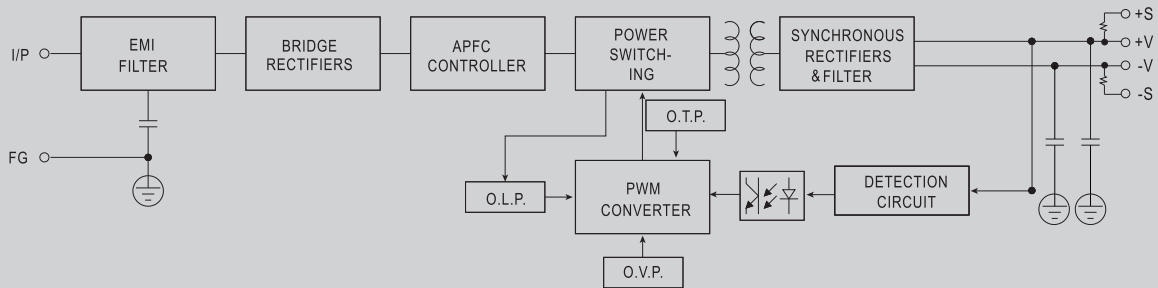
Remote sense pin(CN1):JS-1001-02 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	-S	JS-2001-02 or equivalent	JS-1001-02 or equivalent
2	+S		

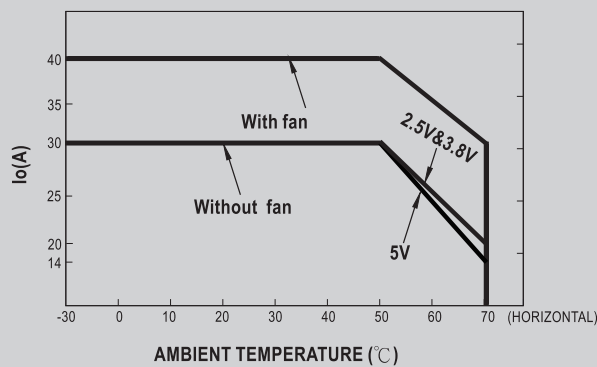
DC Output Terminal pin NO. Assignment

Pin No.	Assignment	Terminal
1	-V	CPB-7 M5
2	+V	

### Block Diagram



### Derating Curve



### Static Characteristics

